STANDARD OPERATING PROCEDURE FOR HOT WORKS

DEPARTMENT: Plant Management **DATE:** May 1, 2006
Revised Date: May 2012

PURPOSE:

This Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to, oxyacetylene cutting, hot riveting, grinding, chipping, soldering, brazing, thawing pipe, torch-applied roofing or flooring, and welding. The permit is intended to prevent (1) accidentally activating the building fire detection system, (2) control losses through accidental ignition of the State of Minnesota property and (3) ensure safety to all building occupants while hot work procedures are being performed. This is in accordance with 29CFR1910 SubPart Q (OSHA) and the Department of Administration's Risk Management Division "Cutting Welding and Other Hot Work" written program.
When possible, perform this work in a non-combustible area or designated welding booth.

PRIMARY STEPS:

1) **Obtain Hot Works permit**

2) **Fill out "Hot Works" Permit & Gain Authorization**

3) **Follow Required Precautions**

4) **Completion of "Hot Works" Permit**

5) **Other Points**

PROCEDURES:

Step #1: Obtaining a "Hot Works" Permit

A) Before doing any type of open flame or hot work services, obtain a Hot Work Permit from the Building Plant Maintenance Engineer (PME) or designee. A permit must be obtained for each specific job to be performed.

B) All work units must fill out a permit. This includes, but is not limited to, Plant Management and outside contractors.

C) The designated contact for outside contractors is the Building PME working with the contractor.

Step #2: Filling out the front of the "Hot Works" Permit & Gaining Authorization

A) The Individual Responsible for Work will fill out the top portion of front page of the Hot Works Permit, stopping after completing the "FIRE WATCH ASSIGNED: Name" line.

B) The Hot Works Permit will be reviewed by the Individual Responsible for Work and the Authorized Representative (PME or designee). During the review, the PME or designee will determine how the hot work will impact the fire detection system, and inspect the area where hot work operations will be performed. If permit will impact the fire detection system, Capitol Security must be notified for proper instructions and Plant Management will deactivate the fire detection systems.

C) The Individual Responsible for Work must ensure that the precautions in the 'Hot Work' Checklist on the back of the Hot Works Permit are followed. Authorization cannot be given unless all precautions are taken. *See back of permit for precautions*.

D) The Individual Responsible for Work will sign off on the "Checklist Completed: Name" line on the back of the permit.

E) The PME or designee will reject or grant approval of the permit to the Individual Responsible for Work for Plant Management and outside contractors.

F) Permits shall not be approved for any length of time exceeding the normal shift hours of the welder or cutter except:
   1. When welding or cutting operations are planned to be continued into the next shift when the same welder or cutter is operating.
   2. When emergency repair work warrants the continued operation of cutting and/or welding into the next shift.

G) If the PME or designee approves the hot work, the PME or designee will complete and sign the middle portion of the front of the permit (the section between "FIRE WATCH ASSIGNED: Name" and "FINAL FIRE WATCH CHECK") and document in a log book each permit issued, the time issued, time of completion, work area and other necessary information and keep in the office for documentation (Insurance purposes).

H) The permit shall be posted in a conspicuous location near the work site by that Individual Responsible for Work.

Step #3: Following Required Precautions

A) All precautions that are checked on the permit in the space provided must be followed as per NFPA 51B.

Step #4 Activation and Completion of "Hot Work" Permit

A) Initial Fire Watch: The work area, and all adjacent areas where sparks may have spread, must be continuously inspected during the entire time cutting, welding, or other hot work was conducted, and for one hour after completion of hot work, including lunch and break times. This Fire Watch must be provided by Plant Management or the outside contractor.

B) Once the Initial Fire Watch is completed, the individual providing the watch must inform the PME or designee (as designated on the Hot Work Permit), and sign **Initial Fire Watch Signature**.

C) The **fire detection system must be reactivated by Plant Management** immediately upon completion of the Initial Fire Watch.

D) The Individual Responsible for Work must ensure the work area is monitored every 30 minutes for at least the next 2 hours after hot work is completed. This period in which the work area will be monitored every 30 minutes will be greater than two hours if deemed necessary by the PME based on the hot work that was done and the associated hazards.

E) The final check must be completed by the Individual Responsible for Work or an assigned representative no more than two hours after hot work has been completed.

F) The **Final Fire Watch Signature** shall be provided at this time. If it is determined, based on the hot work that was performed and the associated hazards, that a period of longer than two hours is needed for the every 30 minute periodic watch, the final check will be completed whenever that period ends.

G) The Hot Works Permit must be posted at the site for 24 hours and then returned to the PME or designee for close out after work is fully completed.

Step #5: Other Points

A) This does not apply to work performed in welding cages.

B) If the Hot Works Permit tag is missing when the Individual Responsible for Work goes out for final check, the Individual Responsible for Work should write up a statement and turn the statement into the PME's office or designee's office for filing and appropriate action. The statement should include craft, building, floor, and room number.

C) For more information, please see the Risk Management Division "Cutting Welding and Other Hot Work" written program.